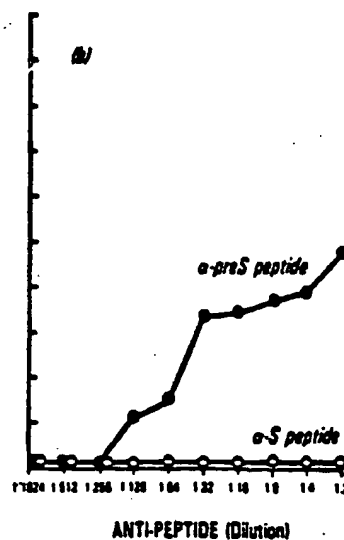
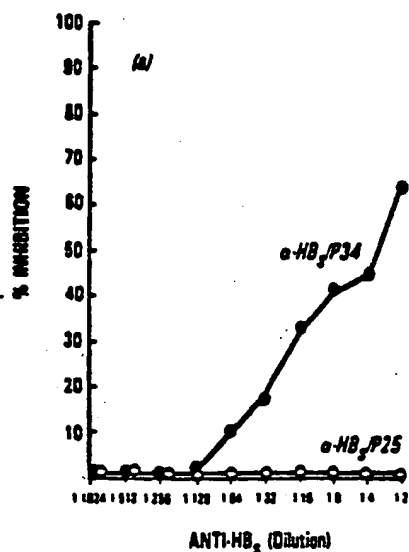




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 4 : C07K 3/00, 17/00, G01N 33/531 G01N 33/543, C12Q 1/70	A1	(11) International Publication Number: WO 86/ 05189 (43) International Publication Date: 12 September 1986 (12.09.86)
(21) International Application Number: PCT/US86/00476 (22) International Filing Date: 6 March 1986 (06.03.86) (31) Priority Application Number: 708,746 (32) Priority Date: 6 March 1985 (06.03.85) (33) Priority Country: US (71) Applicant: SCRIPPS CLINIC AND RESEARCH FOUNDATION [US/US]; 10666 North Torrey Pines Road, La Jolla, CA 92037 (US). (72) Inventors: MILICH, David ; 11591 Polaris, Mira Mesa, CA 92126 (US). CHISARI, Frank ; 1010 Crest Road, Del Mar, CA 92014 (US). (74) Agents: GAMSON, Edward, P.; Dressler, Goldsmith, Shore, Sutker & Milnamow, Ltd., 1800 Prudential Pla- za, Chicago, IL 60601 (US) et al.		(81) Designated States: AT (European patent), BE (Euro- pean patent), CH (European patent), DE (European patent), FR (European patent), GB (European pa- tent), IT (European patent), JP, LU (European pa- tent), NL (European patent), SE (European patent). Published <i>With international search report.</i>

(54) Title: PROTEINACEOUS ANTIGENS WITH CONFORMATION-INDEPENDENT AND CONFORMATION-DEPENDENT DETERMINANTS

**(57) Abstract**

A single polypeptide antigen that includes the amino acid residue sequence and epitope of a conformation-independent antigenic determinant and the amino acid residue sequence but lacks the epitope of a conformation-dependent antigenic determinant and methods of its manufacture and use and articles of manufacture using the same. The uses of the pre-S(2) region polypeptide encoded by the hepatitis B virus genome as a T cell proliferating agent and as a potentiator for enhancing the humoral immune response of animals that exhibit a low humoral response to an S region-containing immunogen are also disclosed.